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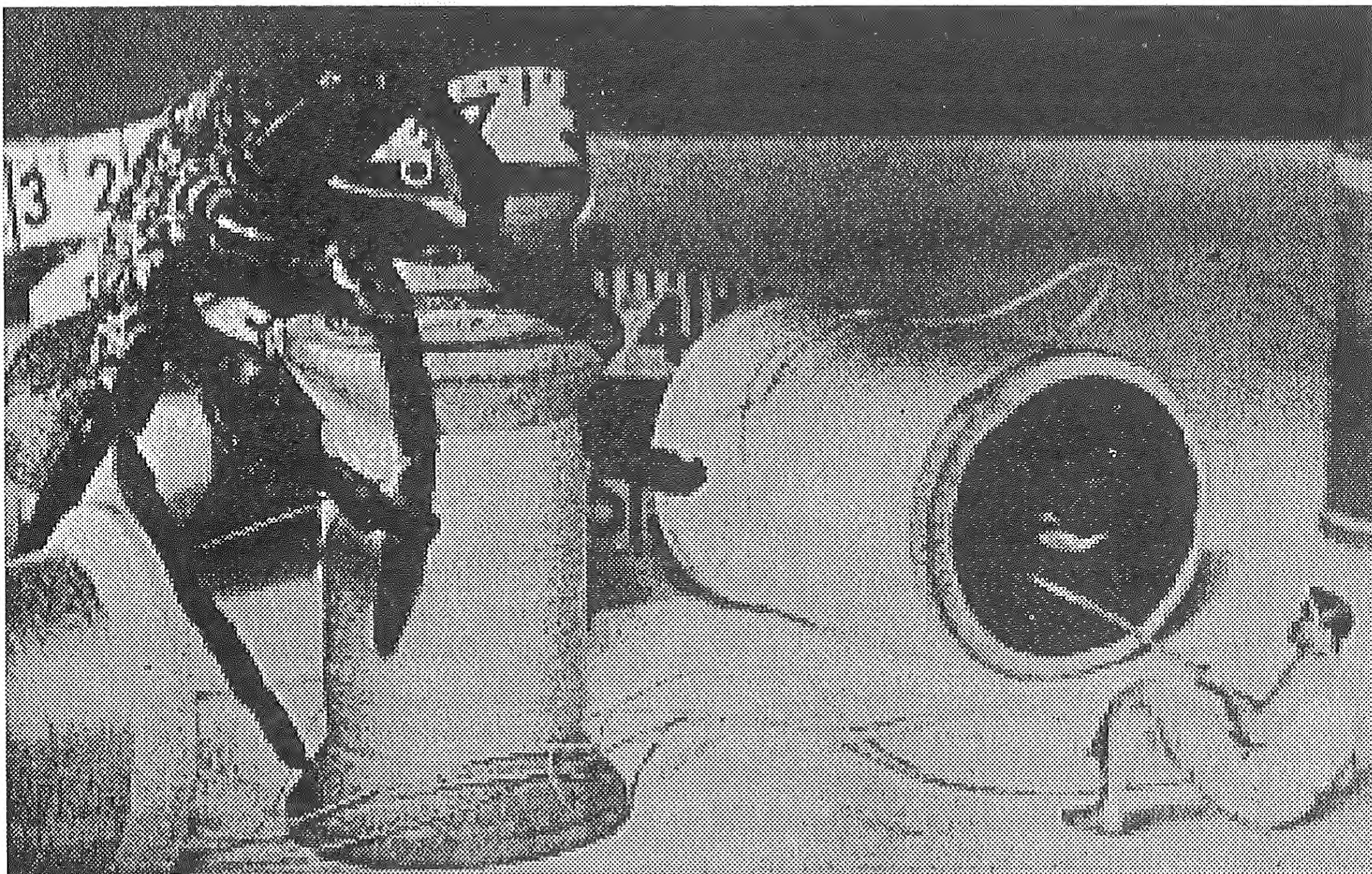
WORKBENCH

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Picture: DigiView Digitised Picture

Next AUG Meeting

Sunday, January 21st at 2pm

(Doors open at 1pm, meeting starts at 2pm sharp)

**AUG meetings are held at Victoria College Burwood Campus
Burwood Highway, Burwood - Melways map 61 reference B5.**

Amiga Users Group Inc, PO Box 48, Boronia 3155 Victoria, Australia

Australia's Largest Independent Association of Amiga Owners
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AMIGA Users Group

Who Are WE?

The Amiga Users Group is a not-for-profit association of people interested in the Amiga computer and related topics. With over 1000 members, we are the largest independent association of Amiga users in Australia.

Club Meetings

Club meetings are held at 2pm on the third Sunday of each month at Victoria College, Burwood Highway, Burwood. Details on how to get there are on the back cover of this newsletter. The dates of upcoming meetings are:

Sunday, January 21st at 2pm

Sunday, February 18th at 2pm

Sunday, March 18th at 2pm

Production Credits

This month's newsletter was edited by Con Kolivas. Equipment and software used was: Amiga 500 with SIN500-2 memory board, Professional Page, and Epson GX80.

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Contributions

Articles, papers, letters, drawings, cartoons and comments are actively sought for publication in Amiga Workbench. All contributions submitted for the purpose of publication that are printed in the newsletter are rewarded on the basis of one free public domain disk copy per column or half page printed with a minimum of one free copy. Contributions may be sent in on disk, paper or uploaded to Amiga Link or Amiga Link II in the area set aside for this purpose. Please send your contributions in text-only, non-formatted if they are on file and remember to include your address for return of disks and tokens for PD disks. Absolute deadline for articles is 23 days before the meeting date. Contributions can be sent to: The Editor, AUG, PO box 48, Boronia, 3155.

Membership and Subscriptions

Membership of the Amiga Users Group is available for an annual fee of \$25. To become a member of AUG, fill in the membership form in this issue (or a photocopy of it), and send it with a cheque or money order for \$25 to: Amiga Users Group, PO Box 48, Boronia, 3155

Public Domain Software

Disks from our public domain library are available on quality 3.5" disks for \$8 each including postage on AUG supplied disks, or \$2 each on your own disks. The group currently holds over 200 volumes, mostly sourced from the USA, with more on the way each month. Details of latest releases are printed in this newsletter, and a catalog disk is also available.

Member's Discounts

The Amiga Users Group negotiates discounts for its members on hardware, software and books.

Currently, Technical Books in Swanston Street in the city offers AUG members a 10% discount on computer related books, as does McGills in Elizabeth Street. Just show your membership card. Although we have no formal arrangements with other companies yet, most seem willing to offer a discount to AUG members. It always pays to ask!

Back Issues of Workbench

All back issues of Amiga Workbench are now available, for \$2 each including postage. Note that there may be delays while issues are reprinted. Back issues are also available at meetings.

Amiga Link I & II - Our Bulletin Board Systems

The Amiga Users Group operates two bulletin board systems devoted to the Amiga, using the Opus message and conferencing software. AmigaLink I and II are available 24 hours a day. AmigaLink I & II can be accessed at V21 (300bps), V22 (1200bps), V23 (1200/75bps) or V22bis (2400bps) using 8 data bits, 1 stop bit and no parity.

AmigaLink is part of a world-wide network of bulletin boards, and we participate in national and international Amiga conferences. AmigaLink has selected Public Domain software available for downloading, and encourages the uploading of useful public domain programs from its users. AmigaLink I (792-3918) is OzNet node number 8:830/324 and AmigaLink II (376-6385) is OzNet node number 1305/998

Newsletter Advertising

The Amiga Users Group accepts commercial advertising in Amiga Workbench subject to the availability of space at these rates:

Quarter page \$20
Half page \$40
Full page \$70
Double page spread: \$120

These rates are for full-size camera-ready copy or Professional Page format only. We have no photographic or typesetting facilities. Absolute deadline for copy is 23 days before the meeting date. Send the copy and your cheque to: The Editor, AUG, PO Box 48, Boronia, 3155, Victoria.

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Ngwa
by R.C. Shephard

I have written this article to be sent to two separate Amiga User Groups. I joined the Melbourne group some two years ago and the Tasmanian group some 18 months back now.

In the early days of me playing around with Digiview I wrote a few pages on my findings with that piece of hard/software and since I sold off the Newtek unit and camera I have not contributed to the Melbourne group newsletter at all and my guilt has finally surfaced and hence this load of garbage.

I first must say that the main reason I have taken the time and effort to write this article is the recent plea from the editor for more articles from the membership. I joined the Melbourne group when the front cover stated a circulation of 750 or somewhere around that figure and believing the group to have somewhere close to that number of members I would have thought contributions would be coming in ALL the time thick and fast. I have been connected with user groups since 1981 and believe I know some of the problems those people face who have to get the group meetings organized the funds under control and the newsletter out on time plus try to keep interest in the group so members will re-join and new comers will want to join to gain the most from their home computer, so to say it in brief I have been there done that.

The Amiga has a very large range of public domain software available for the users so new members as well as long serving members should always find something in the library for their needs, this is one way to keep interest in a group with additions every month to the library.

I have a theory about why Mr Average computer user group member does nothing towards the running of the group or contributions to the newsletter and that is in a word "embarrassment" Do you remember back in the good old school days when the teacher stood out front of the class and asked a question and you Mr Average pupil wanted to answer but you were not 100% sure you had the right answer and feared the rest of the class would laugh if you came out with something that was far from correct. Perhaps thats not you and you may have been the pupil who was just a little too slow to get the hand up and spit the answer out before the smart kids in the class shot up the hand and gave the teacher what he or she was after, and did you notice that when that same teacher asked a question their eyes would immediately descend upon the area of class where the smarties usually sit and Mr Average would not always get that chance to say what he or she hoped may have been right. I relate that to the computer user group members who may want to say something in the newsletter or perhaps the local monthly meeting but is afraid even more to speak up or write an article for fear that the members who read or listen to his or her question/statement will laugh and embarrass that member. I must admit to being one of the pupils who tended to sit back at school and let the others do the answering of questions to me that was the easy way out and I did not have to worry about making an inaccurate statement or giving the wrong answer to teachers question, not very bright I

realize now. I would now be in deep trouble without a spelling checker in my word processor and a calculator to work out my small financial dealings, so thats one way of me saying I am regretting not speaking out at school when I should have. My public speaking and confidence took on a dramatic change back in 1983 when I was in the wrong place at the right time and got myself elected as the Co-ordinator of a local user group here in Hobart, I nearly went into a sweat just thinking how I would cope, but found with help from former members and encouragement from my wife I got by and then moved on to the newsletter editor or back which ever way you look at it and now I am never afraid to put any of my thoughts on paper and send them off all over the place. I have written many articles (mostly dribble) for the newsletters I produced over the four years I was involved in the other group and with this new found confidence I will write the occasional letter to the local newspaper, a politician or two, my chief at work (semi government) the only way to talk to the boss is in writing, and I am never short on words to speak at union meetings and of course local user group meetings, and I contribute ALL the above to the fact that I was almost forced into that very first position in the computer user group, so to me I have a lot to thank computers for. I sincerely hope that this confession which is the first time I have spoken on this subject to ANYONE is of some benefit to all those members out there who are afraid to write for the newsletter or afraid to stand up and ask a simple question at the user group meeting and prefer to ask the fellow sitting next to them when the meetings over "what was he talking about" when he mentioned Fish disks?

I attended the first meeting of the Tasmanian Amiga User Group here in Tasmania some 2 years ago or perhaps 3 years when a middle aged man asked what is a "FISH DISK" and will they run on my disk drive or do I need something special for them, there was a snigger from a couple of people who just may have succeeded in turning that man away from the user group for ever, some people will NOT attend a meeting for those very reasons as the meeting is filled with and I quote "smart arse kids" Those same people could be an asset to the group but never got the chance and felt talked down to with that attitude amongst some members, and if they are not prepared to stand up and ask a question at the meeting how the hell are we going to persuade them to put pen to paper and write their thoughts, not easy I can tell you. I did set out to write a short article regards the Sidecar and hard drives with fast file format but got very carried away to say the least, so I might now go on with what I wanted to say about Sidecar.

I always thought I wanted a hard drive and kept talking about them at home and finally the word was "buy the damn thing then" and that might keep you quite. I looked at interfaces or let's re-phrase that I phoned several dealers and manufacturers on the mainland and asked what was available, what would have been great here was to have some reviews in the newsletter to read up on before I made all those costly phone calls. I wanted to run the hard drive from my A1000 and be assured that the "INSIDER" internal memory would not upset the hard drive interface, thats sounds easier than it was for I could not get a 100% verbal guarantee that all three would be compatible, so buying on a trail basis was not on for me. I then

looked at Sidecar and talked to owners of that now extinct beast and found other users with the same configuration I wanted so I got hold of a Sidecar after a little ring around, Sidecar worked fine with the A1000 version 1.4 PAL and the Insider 1 megabyte internal memory so I was very well pleased.

I purchased a copy of Australian Personal Computer magazine and went carefully through the advertisements to find a hard drive for me - I wanted the MiniScribe 3650 which is a 40 megabyte MFM drive and controller card. The price was important in my selection and the dealer selected had to be one who regularly advertises and over a long period, I have seen cheaper products from un-heard of (to me) dealers but I left them alone. I will mention that Data Parts was my choice and after a phone call to confirm stock availability and double check the price and postage to Tasmania the bank cheque was sent, and some days later a small box arrived with the Miniscribe 3650 and card plus leads ready to fit inside the Sidecar. The next day saw the hard drive fitted to Sidecar internally and the 5.25" original drive was placed in a case outside of Sidecar, the low level format was commenced and sh-t was my remarks as error after error came up on the screen, to save time here the hard drive had developed another 21 hard errors in transit to Tasmania so I had figured that the heads were not parked to protect the drive in transit and the poor packaging had not helped either. This was Saturday afternoon so I had to wait till Monday came around and I was set for a long hot phone call to Data Parts to sort them out, however I spoke to a very understanding and sympathetic man who asked me to return the drive in same packing and he would re-pack a NEW drive and personally send it back to me plus he made his apology for his staff in the shabby way they must have packaged the hard drive, should not have happened but the service was great. A week later the new drive arrived - in it went to the Sidecar now we are finally getting to the main part of the story I originally wanted to write about. I had read three previous articles on the use of Sidecar with hard drives and the fast filing system and wanting to get the most from the Amiga Sidecar and the hard drive I wanted the FFS installed on my drive for that was the best Commodore could offer hard drive users. I spoke to the Melbourne User Group trouble shooter on Sidecar/Bridgeboard and he was not over impressed with FFS and preferred to old format, but was I turned off NO! he also informed me that the article I had spoken of using FFS with Sidecar had a typo error so that would not work, this was after I had spent many hours reading and re-reading the articles to see where I was going wrong, for once it was someone else and not old me doing it wrong. I then got hold of a Bridgeboard owners manual and this is the best thing any Sidecar owner could have, the Sidecar owners manual is poor to say the least and does not go into Sidecar with much depth.

Here is how I set up my Sidecar for those who may want to make use of the Fast Filing System on the A1000 with Sidecar. Do the hardware first of course and then boot the Amiga and go into the CLI and type BINDDRIVERS then type DJMOUNT FFS this may take a minute or two to perform those two functions as it actually does a check of the Sidecar (IBM) side of the Amiga then with your A1060 disk that came with Sidecar load

the program on that disk called PC and then click on PC-MONO or PC-COLOR you should have set the dip switches inside Sidecar to suit which ever one you wanted to use, we can be using either Kickstart 1.2 or 1.3 at this stage by the way. After the PC mono or PC color program runs and loads the IBM side of the Amiga we will have the > prompt and then we just key in DEBUG then at the - prompt key in g=800:5 or if your disk controller manual states different then use that, debug will ask a heap of questions most of the answers will be in the owners manual that comes with the hard disk controller and the rest will be found on the test sheet that MUST accompany the hard drive, my drive had three hard errors to enter into the debug program, this is important information unless you use an automatic low level format program like Miniscribes own format program "Disk Manager" an easy to use program.

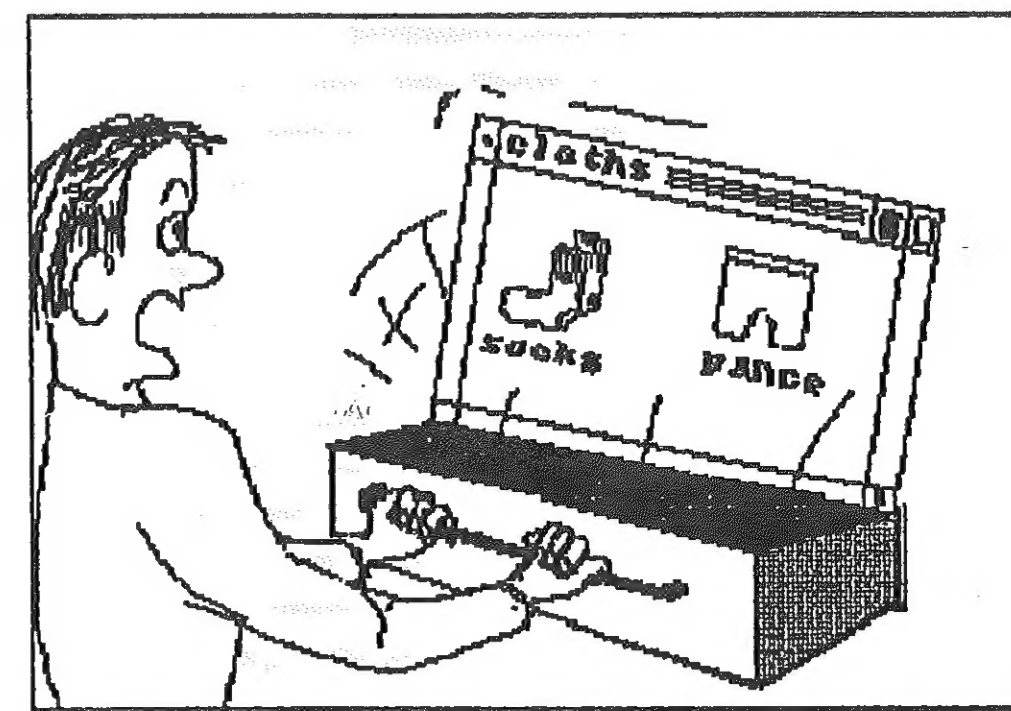
After the low level format is completed depending on which program you used debug or Disk manager the prompt will either ask for partitions to allocate or ask you to load a program called Fdisk which is the MS-DOS program to partition off the hard drive, you can select your needs here as to what area you require for MS-DOS files and programs, then the format (IBM) will be done to the area you partitioned off for MS-DOS. Following the format of that side of the hard drive you can allocate the rest of the drive to the Amiga or what ever suits your needs, I chose to have one 33 meg Amiga drive one 3 meg Amiga data drive and one 6 meg IBM drive and thats 42 meg total out of a 40 meg drive, good value I reckon, the extra hard drive space comes from the manufacturer who puts extra on the drive to allocate any bad sectors that the hard disk may have during manufacture and most of us use those areas that are spare for storage.

After debug, fdisk, adisk format have all been run and everything is running fine go for a control_Amiga_Amiga to re-boot the Amiga and NOW WE MUST HAVE KICKSTART 1.3 loaded and when in the CLI using the JANUS 1.3 Bridgeboard disk supplied with Bridgeboard (not A1060 supplied with Sidecar) type BINDDRIVERS then type DJMOUNT FFS note the difference from before when we mounted the hard drive and Sidecar, a little time will be taken for the Amiga to check out the Sidecar IBM self test which includes the RAM check and if you have the maximum IBM RAM 640K then even longer time will be taken to check the system. Finally the cursor will re-appear and then type this to format the Amiga hard drive FORMAT DRIVE JH0:name "HardDriveName" FFS note the FFS after the last name, this is the part we need to make our hard drive make use of the fast filing system as available with the newer 1.3 Kickstart. I am not sure if all that is true but thats how I read it from the Bridgeboard owner manual and it worked fine for me so what more can I say! Below is the startup-sequences for my floppy DFO: drive and the hard drive JH0:

```
first the floppy.....
BINDDRIVERS
DJMOUNT FFS
CD JH0:C
JH0:C/EXECUTE JH0:S/STARTUP2-SEQUENCE
Now the hard drive
```

```
SETPATCH > NIL:
FASTMEMFIRST
ASSIGN SYS: JH0:
ASSIGN LIBS: SYS:LIBS
ASSIGN PREFS: SYS:PREFS
ASSIGN C: SYS:C
ASSIGN L: SYS:L
ASSIGN S: SYS:S
ASSIGN DEVS: SYS:DEVS
ASSIGN FONTS: SYS:FONTS
LOADWB
ENDCLI > NIL:
```

All the above takes my system around 58 seconds every time I hit the Control-Amiga-Amiga keys and that is not as fast as many hard drives boot up however I do have the added advantage of having the use of MS-DOS to run the occasional IBM program. Any help and advice greatly welcomed from the experts.



PUBLIC DOMAIN REVIEW by Perry Rosenboom

Welcome to what I hope will become a regular column in which I will look at some of the huge variety of Public Domain software available for the Amiga.

There was a time when Public Domain software was considered to be no frills, poor quality hacked up software, in which you were not surprised if there were one or two bugs. Things have come a long way in the Public Domain, and if you haven't checked out some of the offerings available then "Do yourself a favour" (as the man with the hat said) and take a look. Generally speaking, PD software is of excellent quality, and often includes source code. Sometimes, if you find the software useful, a small donation will be asked for - this is known as shareware. For your donation, you may get source, more documentation, the latest version of the software, or a thank you. Sending of donations ensures that more good quality software is developed, and that the Author is recognised for the sometimes considerable effort that they put in.

PD software includes games, digitised sound and graphics, utilities, word processors, editors, demos and even compilers. In this column I'll try to cover a good cross section of software available, and I'm open to (clean) suggestions.

The most well known source of PD software is from the Fish collection, which has been built up by a Canadian gentleman called Fred Fish. At the time of writing, the collection consists of around 250 disks, each of them full of good software. In addition to the Fish collection, there are other collections which have been put together by various user groups and organisations. The Amiga Users Group keeps a vast library of PD software which is available to members on good quality 3.5" disks for \$8 each including postage on AUG supplied disks, or \$2 each on your own disks. Details of latest releases are published in "Workbench", and a catalog disk is also available. An order form can be found in the back of "Workbench". Disks can be ordered and copied during the Monthly User Group meetings, although preference will be given to small lots if there is a big demand. A summary of all PD disks held by the User Group can be browsed at the meetings. At the October meeting, I asked for 10 disks to be copied, and they were returned to me via the post within a few days. If you haven't been to an AUG meeting, now might be the time to go!

In looking at each program, I'll include details of the Author, the size of the donation (if the software is shareware), whether there is source included and the language the software was written in. Due to the volume of PD material available, I will never be able to cover everything, so if there is something that you would particularly like to see reviewed, or you are using something which you think is worthwhile - drop me a note on AmigaLink I or AmigaLink II Bulletin Boards. Also, if you find any bugs in PD software that you think others should know about, let me know and I'll pass the information on via this column.

PD Review - DiskX

DiskX can be described as a disk editor which displays disk information on a sector by sector basis, as opposed to displaying the contents of an individual file. With DiskX, it is possible to go to specific sectors on the disk, and look at the information stored there, even if there are no files on the disk!

First, some background and definitions. DiskX was written by Steve Tibbett from Ontario, Canada. It comes as a single program, and a documentation file - no source is provided. In Steve's words: "If you like DiskX, you can either do Absolutely nothing about it and just hope I manage to stay alive and keep making these things, or you can do something about it. What you can do is send me some cash, or, send me something you've written." I guess you could call DiskX shareware, although the amount is unspecified. Steve includes his address and two Bulletin Board numbers where he can be contacted.

Now for some software details. DiskX lets you view a disk in a block by block manner, so I'd better define a few terms. A

block is the smallest unit of data that a disk drive will transfer when you (or your program) requests a disk read or write. Block sizes may vary between different types of computer, but the Amiga works with 512 character blocks. The term "Root Block" refers to the block on the disk (which is at a fixed location) that contains all the information regarding the disk itself. The Root Block has pointers to File Header Blocks (which contain information about individual files), and User Directory Blocks (which contain information about the directory and the files within it). Basically, each drawer on your workbench disk is a User Directory. Normally, all these blocks and different block types are of little or no interest - AmigaDOS handles them all for us. DiskX makes them all visible to the point where we can do some good old fashioned hacking! A note of warning: It is very easy to render a disk totally useless (I think the technical term is "stuffed") when using the 'Edit' mode of DiskX, so use it carefully.

It's a good idea to make a backup of the disk before you start (because I don't need enemies this early in my journalistic career)... DiskX has been around for a while - the version which I'm looking at is 2.1. It was originally developed because the author was attempting to use DiskEd, which he says is designed to confuse everybody except the person who wrote it. He decided that there must be a better way, after all, why should anybody use software which is user aggressive on a system with great screen and mouse capabilities? The result is DiskX, a program which allows you to display and edit disks, both hard and floppy.

The documentation proved by the author is good (6 pages long when printed), and is updated with each new release of the software. There are four sections; An introduction, The basics of DiskX, Features added to newer versions of DiskX, and the Fast File System (yes, FFS is supported!). Unfortunately, my copy of the documentation was missing the FFS section. I found that I didn't have to refer to the documentation, as DiskX is menu driven and very easy to use, however, there is some very good background information in the documentation which is worth taking a peek at.

Now to the good part.... DiskX is run from the CLI, and can be run either in a normal High Resolution screen or in Interlace mode. There are some benefits to using the interlace mode, which I'll describe later. Interlace gets to me after a while, and I'm not fortunate enough to own a 2000 with a flicker fixer, so I tend to use the HiRes screen. If you're a thrill seeker and want to use interlace, just supply an argument after the DiskX command.

DiskX runs in its own white on black screen, and is mostly mouse driven through the use of menus and gadgets. On startup, DiskX automatically looks for disk drives connected to your machine, and builds them into the 'Unit' menu so they can be selected. Firstly, DiskX opens DFO: and reads the Root Block of that disk. Gadgets appear to allow you to go straight to a block (if you know the number of the block you are looking for), to a particular track and head number, find the header of an individual file, open another disk drive (if you have one that is!), go to block zero (that's the boot block on a

floppy), and many other things. These functions are available at all times, so if you lose your way (like I did), you can go back to the Root Block, or block zero etc.

When DiskX looks at a block, it decides what sort of block is being examined, and displays the block in the appropriate format. For example if we are looking at a Root Block, information relevant only to root blocks is displayed (such as the location of the bitmap, the disk status, the disk creation date). If we are looking at a file header block, information such as the Protection characteristics and file length are displayed. You can ask for the block to be displayed in a number of different ways at any time, including ASCII and Hex formats, as a Data Block, Root Block, File Header Block and User Directory Block. The block number, track and sector numbers, and head number are displayed at all times. If you are displaying a block in Hex or ASCII, only half of the block is displayed at a time (there is a gadget to select the other half), unless you are using an interlaced screen. The other benefit of an interlaced screen is that while displaying a file header block, all of the block numbers of blocks that make up that file are displayed. This means that if you are interested in, say, the third block of a particular file, you can find it quickly.

At any time, you can go into Edit mode, and physically change what is written on the disk. DiskX will create a new checksum for the block, and write it to the disk. Two things which impressed me the (apart from the overall quality of the software) would have to be the string search and the output capabilities. String search will display ANY text string found on the disk, along with the location, from the current position on the disk, or through the whole disk. I would never suggest that this may come in useful for getting through that elusive role playing game.

File output capability allows you to take an individual block from the disk and write it to another disk (if you have one connected), or to RAM. Very handy for checking out boot blocks! There is also a neat little "Attempt to recover file" command tucked away in one of the menus. Basically this attempts to recover a DELETED file from the disk. Success or failure depends upon whether anything else has been written to the disk in the areas where your DELETED file was. A very handy facility to have....

Overall, DiskX is a good example of some of the quality software which is available from the Public Domain. I found it to be a very useful tool when attempting to set up my hard disk (that's another story), and in the end it saved me a lot of time and frustration. If you need a disk editor, check this one out - it's listed in the Fred Fish collection on Disk number 158, but I'm not sure what version that is. I downloaded my copy from AmigaLink II. Have you ever wondered what gets written to a newly formatted disk? I'll leave you to check it out for yourself - it's a good way to become familiar with DiskX. See you again next month, provided I don't get too much hate mail!

A City not necessarily Populous by Con Kolivas

After spending long hours between pages of textbooks, you find that over the summer holidays, some games tend to hold your attention for longer than you could possibly imagine. In fact, you find that you're playing games that you don't like but you couldn't be bothered rebooting and starting something else. After this wears off, your taste in games becomes a lot more sensible, and you attempt to concentrate on the real games. So what does all this garbage mean? Well, this is a review of two Games, both similar in concept superficially, but otherwise completely different and completely original. The games - Populous and SimCity.

The idea behind Populous is thus; you are a deity (sounds good already doesn't it) and you are trying to populate a world with your followers. The problem is, there is another deity, and he/she is trying to do the same thing, so what happens is the game becomes a struggle in survival, and war (more details later). SimCity; you are a Mayor (not quite the same power but still something to be proud of). You have control over a City (could be a small town or a huge megalopolis), and you have a task to complete - make the town fruitful and efficient to attract more people and thus more commerce and industry. Not quite the same as Populous once you hear the details is it.

On to Populous. The game has with it some 500 worlds, all with different terrain, land patterns and associated difficulty levels *if playing against the computer*. You have a power level called Manna (in the style of Dungeon Master? Well, only the name is the same). The amount of Manna you have governs how powerful an action you can perform. You begin the game looking at a closeup of part of the world's terrain, with a complete map of the current world in the background (on the page of a book), with a marker to show you the current enlargement.

You start the game with anywhere from one follower to who knows how many (depends on the conquest scenario). You cannot directly control the followers but you can tell them their basic aim in life (at the moment). Generally, you get them to "settle" which means they run around looking for flat ground and create dwellings, the size of the dwelling depends on the amount of flat ground around the centre of the dwelling. This is where your magic power comes in useful. The weakest power you have is to raise or lower land, meaning you can level it off for your followers to create more and larger settlements. Bars indicate the current population of you and your opponent's followers.

As you can zoom in on any location, you think you could lower the land about your opponent's followers and make it impossible for them to settle, but alas, you can only raise/lower land around your followers (or if the rules are such, only around a dwelling!). However, you gain the power to do some nice devastating things with more manna - Earthquake is nice, lowering land and destroying dwellings, Swamp is even better, leaving patchy areas of ground, in which if a follower steps, he drowns (good for removing their leader), flood raises the level

of the water (over the whole world) one level, drowning anyone too low on the ground (watch this, as you may drown your own followers, and so on).

After a while, with enough followers, you can create knights out of your current leader, which turns him into a fighting machine, running around killing any opponents, burning their dwellings and so on until he dies - good value.

You can direct people to fight, which means they will fight anyone in the vicinity or settle. You can, by placing your Papal Magnet elsewhere in the world direct them to anywhere else (like into the heart of the opponents dwellings). But, like all good programs, there is an ultimate power. Called Armageddon, all your followers group and head towards the centre of the world and fight a battle to the end with all the opponent's followers. Once the world is rid of your opponent's followers, you win the game (or rather the scenario), and if you are playing conquest, it means you will advance to a harder world, with a better computer opponent, in harder terrain.

There are four terrain types, grass, desert, ice and rock, all with their characteristics on the followers abilities (in ice for example, people multiply slower and there are no technology levels). There are trees and rocky mountains in places for good looks and for blocking dwellings. Game settings include the computer's aggressiveness, and the speed of the followers, which are preset if you are playing conquest. Water can be set to fatal or harmful - fatal means a person falling in during say an earthquake is dead, whereas harmful means they lose power until they die or are helped out. There are other options, a complete description of which would run pages and pages, so onto impressions.

The game opens with a catchy title screen and quickly moves onto a simple demo with a wonderful, quite majestic theme. From the title screen you can move onto tutorial (a very easy game), conquest (play against the computer on preset terrains and settings or data disks) or even custom, where you can set your own settings, even redraw the world to suit your desires, or play against an opponent via the serial cable (eg modem). While playing, you can turn the sound effects off, which are basically the heartbeat of your leader, any fighting/burning sounds, and sounds of any deity induced disasters. You can also turn the music off, which is basically background choir-type atmosphere as you would expect in a movie depicting stories like this, but you can never turn off the very low level, cery wind sound in the background. On the screen, all the powers are depicted by icons and everything else around it is beautifully depicted as a Deity would see.

The graphics are fine, or rather excellent, considering this is a simulation of sorts. The sounds are very atmospheric and the few sound effects there are are all convincing and effective. The game plan, although it takes some learning to remember all the icons, is very easy to use, and is completely mouse driven (well you can use the keyboard to move around but I found the mouse did fine). I have had no crashes of any sort from the game. It plays reliably, and is very addictive (I'm up to level 68 at the moment). Being such an original game in the style I

discovered is what I really liked after all, I would give it a nine and a half out of ten. What would warrant a ten you ask? Well, I'm not sure, but within the limitations imposed on the game by being a simulation, this game (to me anyway) is perfect.

Populous was the game I was dying to show to my Brother. After playing it for some time, I finally took it with me to his place, booted it up on his computer, beat level 64 and then guess what? It crashed. I tried again on another level, same result. It turns out (I think) it didn't agree with his 1.3 Kickstart (mine being 1.2). This is where the interesting part begins. He wanted desperately to show me his SimCity. When he came over and tried it on my machine, my machine locked up after playing a while! So Populous is a 1.2 game and SimCity a 1.3 game?

Anyway, while at his house, I got a good chance to try out SimCity. It took a long time to understand every aspect to the game, reading through the manual at least three times. The game, unlike Populous, does not take over your entire machine, so you can play it and multitask doing anything else.

SimCity starts up with two screens! (you'd think being told that, that it was an Amiga Game, but it turns out it's out on all sorts of dud computers as well. One screen is the edit screen and the other is the Map & Graph screen.

You have a certain amount of money (governed by tax revenue and spending). With that money, you can demolish buildings, build train lines, put in roads, parkland, commercial, industrial or residential space. From that, the city will develop on it's own. You must supply power to all places, for them to develop, and a good transport system is needed for maximum development of the zone (rail is more efficient than roads but costs more to maintain). After a while, when things grow, you are told by the people (the Sims) when they do not agree with something or ant something else. The crime rate could be high for example, so you must put in a police station, or people will begin to leave the place, but police stations cost a lot of money to install and then cost more money to maintain. Likewise with Fire Departments. So you must put them in intelligently. To do that, you move to the map screen, and click on the crime for example, and it will show you a map of the city, with a crime colour contour over it. You can do similar with traffic, fire protection, pollution, growth rate and so forth.

But just when things seem to be getting more difficult, they become even more complex. Residential areas develop best around the city centre, and bring in more tax in high land areas. High land areas are governed by distance to the city and the surrounding zones - ie if the house is on natural shoreline with natural parkland surrounding it, it is worth heaps in tax.

When bringing in more people, by increasing the residential zones, you find unemployment rises, so you must install more commercial and industrial sites. But after a while, commerce and industry will level off, so you must attract more industry by putting in a sea port, and more commerce with an airport, or more people by putting in a stadium. Then to top it all off, you run out of power, so you must put in another power station and

decide whether to make it coal or nuclear powered.

Then finally when everything seems to have fit in a nice place, a disaster hits, a plane might crash or a monster might stomp all over your city (Godzilla usually). So you've got to stop the fire spreading by demolishing neighbouring zones and putting in a fire department if there wasn't one nearby already. So you start running out of money, so you raise the taxes slightly, and people no longer come into the city, and revenue drops, and you have no more money!

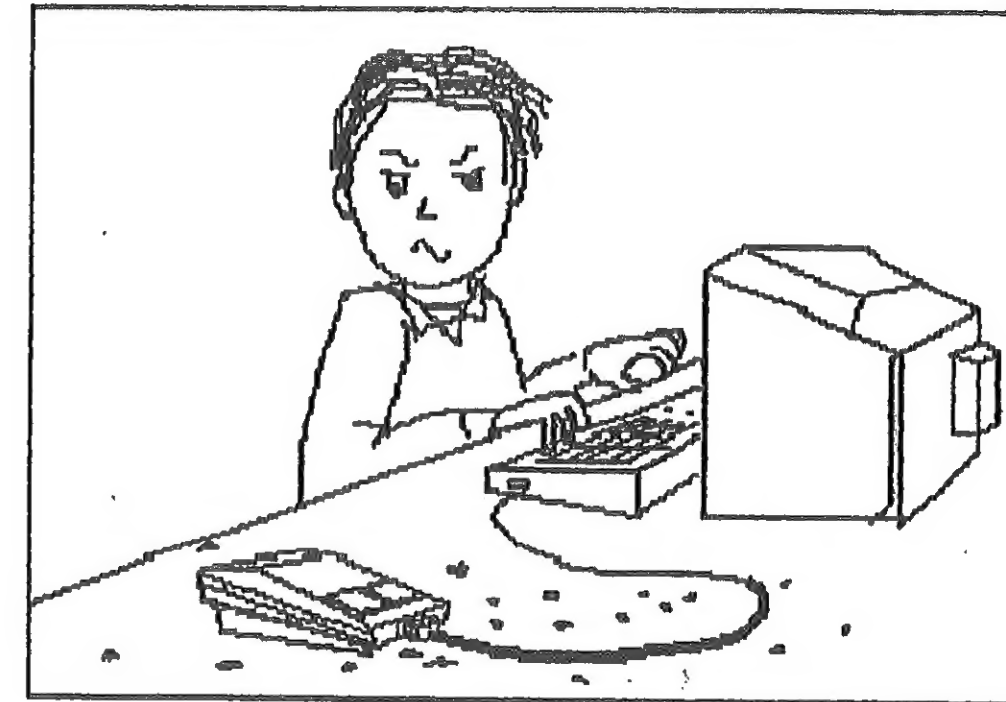
As you can see, the game is incredibly complex, and seems to have enough to keep you interested for years to come. But just when I figured it all out, I got bored. Why? I don't know. Anyway, the game comes with scenarios prepared on the disk, such as Hamburg in the first world war under bombing, and you have to make the city survive the disaster and still keep growing, to get the key to the city. Otherwise, you can start your own city from scratch, with a difficulty level indicating how much money you start with and how tolerant the Sims are to problems such as taxes. I found the only reason to play was the scenarios after I got the hang of the game, and by then I could beat them all first go, except one called Dullsville, which is suffering by boredom, and you have to turn the place into a Metropolis (100,000 population) within 30 years. But then I found a bug in the program which allowed me to cheat slightly and that ruined the game even more for me (despite that it was version 1.1, they had not fixed this bug). If you are stuck on the game and want to know that bug, give me a call (I'm on the inside front cover as editor).

All in all, though, the game is a beautiful package, with great graphics, infinite diversity, good addictibility, and decent (although very limited) sounds. I give it an eight out of ten, despite all it's good points, because I'm me and that's what I reckon it's worth.

I found myself going back to Populous with first less enthusiasm when I first played SimCity on my Brother's, but after the novelty wore off, I found Populous just as pleasing, although it didn't look quite as impressive, as always.

Despite my ratings differing between these two games, I think they are both worthy of staying in the *I'll keep playing these games* box of disks, and I highly recommend both of them. Especially Populous with it's large number of worlds and data disks if you make it through them. Actually, to show you how addictive Populous first was to me, I have not been beaten by the computer since the first time I played, and I still have been battling it out, simply because I know of the number of levels to go.

Some of the nice touches worth noting in both were the overall quality of both games, with effort being put into both. Populous had some nice surprises in it sometimes that I didn't even know were there. For instance, on one occasion, a little magician on a magic carpet appeared and flew across the world laying down trees, and I saw just briefly some sort of amphibious creature wandering through the world - like the occasional unexpected things you see in Rocket Ranger.



HOW TO GET OLD PROGRAMS TO RUN ON NEW AMIGAS by Richard England

The problem with certain early programs for the Amiga is that they were not designed with expanded memory in mind. Some of these programs include Arcticfox, Skyfox, Deluxe Print, MusicCraft, and the DigiView demo.

On Deluxe Print and the DigiView demo this is manifested by a row of small black bars visible in a corner of the screen. In Deluxe Print this occurs while editing letterheads, and the bars actually appear with the edited image on a hard copy. Skyfox shows a totally corrupted screen although it is evident that other aspects of the program are working correctly.

The reason for this is that Amiga programs consist of one or more modules called "hunks", which correspond to the various modules which are concatenated by the linker after compilation or assembly. Each hunk is labelled by the linker (according to instructions from the compiler or instructions directly to the linker) as one of three types, viz. CODE (consisting of the executable program routines), DATA (consisting of data including graphics and sound), and BSS (consisting of definitions of memory to allocate at runtime for storing variables). The AmigaDOS loader (since AmigaDOS version 1.1) will try to load both CODE and DATA hunks into FAST ram if available. This causes problems with programs that use data structures that must be in CHIP ram, because the specialized graphics and sound chips (PAD, i.e. Paula/Agnus/Denise) of the Amiga can only address CHIP memory (the lowest 512 Kbytes in current Amigas). Version 1.1 of the operating system introduced the ability to additionally define each hunk as loading into CHIP, FAST, or "doesn't matter" (whatever is available) memory.

Incidentally, the A501 internal RAM expansion in the A500, and the upper 512 Kbytes memory in the Amiga 2000 is not fast memory. It lies on the same side of the gate in the Amiga bus as the PAD and access to it is slowed by competition with the PAD. However it is not accessible to the PAD and so is correctly called "slow memory", and doesn't have the advantage of either chip or fast memory.

Solution #1 - NoFastMem

This program is provided by Commodore on the Workbench disk in the System drawer. It can be operated from the CLI or Workbench and works by allocating all available fast memory. If run from the Workbench it works as a toggle and so the memory can be reclaimed. The problem with using NoFastMem is that all of your expansion memory is no longer available for other purposes.

Solution #2 - FixBoot

Some of the offending programs (mainly the games) auto-boot as a workbench disk, thereby precluding the use of the NoFastMem program (unless you can successfully modify the startup-sequence to run NoFastMem, and find some room for it on the disk).

FixBoot reads in the bootblock of the requested disk. It then inserts a small segment of code which, upon booting the disk, allocates all the available expansion memory. The bootblock is then written back to disk. This solution is adequate for games that take over the machine, but suffers from the same limitation as NoFastMem in that you are unable to use your expansion memory if you are multitasking. I found it entirely adequate for Skyfox (which I still think is one of the best games for the Amiga, despite its vintage).

Solution #3 - FixHunk (Fred Fish 197)

FixHunk will modify the hunk headers so that all DATA and BSS hunks in the file will be loaded into CHIP memory. CODE hunks will still load into FAST ram if available. There is no way to determine which specific DATA hunk should reside in CHIP ram, so FIXHUNK places them all there. The new version on FF197 (V2.1) includes an interactive mode to select where each DATA or BSS hunk will load into memory, support for overlays, support for AC BASIC compiled programs, and support for new hunk types and used by BLink.

I decided it would be best to process Deluxe Print with the Ma-rauder Decoder program before using FixHunk. Several earlier Electronic Arts programs use a form of copy protection where the program is split into a loader program e.g. Deluxe Print, and the actual runtime module e.g. c/dprint.dat. Decoder combines these into one file that is no longer copy protected, so that it loads faster and can be installed on a hard disk. Deluxe Print now worked satisfactorily with these modifications (and the conversion to version 1.3 printer drivers).

Solution #4 - Buy A New Version

Despite the improvements these changes made in Deluxe Print, I decided to upgrade to Deluxe Print II, which is designed for expanded Amigas and can handle other features on new Amigas such as large lists of fonts. I'm still not sure if it was worth it.

Solution #5 - Turn Your "fast memory" Into True Chip Memory

This involves buying a new Obese Agnus chip for about \$65 and following the soldering instructions on "Pat500.txt", a file available on several bulletin boards. That slow memory might as well be available to the PAD.

Footnote I really only wrote this article so I could get some free print space and make the following request. Could some kind person upload the following PD programs onto ALink II and leave me a message to let me know?
Please note the version numbers.

FF201 Draco V1.2
FF205 BattleForce V3.01
FF217 Snipit V1.2
FF188 MinRexx
FF197 Find V1.2 & FixHunk V2.1
FF179 TSnip V1.4a
FF181 AmXLisp V2.00

Game Review: Predator

This is the Amiga version of the film in which Arnold Schwarzenegger runs around a jungle shooting kidnapper-terrorists and is continually finding his fellow commandos strung up (and SKINNED - yech) by a mysterious alien who just happens to be there. I must confess that I haven't seen the film (been too busy checking out Clive Barker's HellRaiser films - when are we gonna see games about THEM, eh?), but judging from the game, I'm not missing much.

My trepidation began when the first of the two-disk set just displayed a short animation of a saucer flying by earth (reminiscent of the scene right at the start of John Carpenter's remake of 'The Thing'), and a 'Please insert disk two' message (it must be doing something else, otherwise, why bother putting two disks in the package?).

The main game loading seemed rather jerky, with flashes of colour that reminded me strongly of a game that was about to visit the turbaned one (which this game does, on occasion). It settled down eventually, and a chopper landed in a jungle clearing, disgorging several commandos and Major Schaefer (i.e. Arnie).

One really annoying thing is that Major Arnie can't move directly up or down; he has to move either left/right and diagonally. Another really annoying thing is that he must continually move to the right; if he puts down a loaded weapon and it moves past off the screen to the left, then it's gone. And those hand grenades are utterly useless.

The background scenery is very nicely rendered, although the characters look rather square headed and move as if they were full of Mogadons (i.e. s-l-o-w-l-y). But the sound effects are excellent! It sounds exactly like an Amazonian jungle full of dead, skinned, strung-up commandos.

So, to sum up? Four out of ten, I'm afraid. There are plenty of better games for the Amiga around. Wait until this one appears in the El Cheapo Remaindered Disks bin at Maxwell's.
Svatoi Nikolaj

p.s. coming soon for the Amiga (in response to those fundamentalists who put the Bible onto Disk) - the Necronomicon of Abdul Alhazred!

Public Domain Stuff that Should Be Included with the Workbench Disk: Xoper 1.3 by Werner Gunther

(sorry folks, I went through the partial Fish Disk listings that I have, and I can't tell where this one came from. somewhere after Fish Disk 146).

This is yet another CLI level thing, but it is so massively useful that even you hardened gamefreaks out there should learn how to open a CLI or Shell, just to play around with this one.

Starting it up is as simple as typing 'Xoper', and it installs itself as a separate process (i.e. you don't need to 'Runback' it), and... oh, what does it do? It provides a console-type control for anything that's happening on your Amiga. This is the best evidence yet that the Amiga multitasks (as if there was any doubt). For example, as I sit typing this, Xoper tells me that I have one CLI running, two background CLIs, two track-disk.device processes, an input.device, NEWCON, CON, RAD, two 'File System' processes, two Workbench processes (I'll have to stop typing 'LoadWB' every time I want to change the RamDisk icon!), and of course, Xoper itself. It also tells me the priorities that they are running at, whether they are processes or tasks, and how much CPU each is using. And the really fun thing is that you can alter any of them, or remove them altogether!

If you're experimenting with running batch tasks in the background, they can often run away with themselves. If they're running in the background, they don't have a window associated with them... how're you gonna send a control-C to it? Xoper will let you send a break to a process, freeze it (if it's killing the machine's performance), unfreeze it again (very handy), or kill it completely, (usually) removing any associated screens, windows, etc. (and if it doesn't, you can explicitly close windows and screens).

You can see which files are currently open, which locks are currently active (if you're wondering why that disk icon is still there when you took that disk out five minutes ago), snoop in on a processes' memory allocation requests, change the directory that process is currently sitting at, view task ports, fonts, view the Cold, COol and WarmCapture vectors (handy for virus spotting), and close the whole thing off, bringing it back with a hotkey.

It may not improve your high scores on Blood Money, but if you're into AmigaDOS and you want a bit more control over it, then this one's Made For You!

- saint Nikolai

Look
Ma!

No
Articles!

Zork Zero

The American software house Infocom stuck gold with Zork. This bestseller had you journeying far into the Great Underground Empire in the search for the incomparable Treasures of Zork. Sticking to a good thing, they released Zork Two and Three. All three are wonderfully tongue in cheek, and feature many essential objects created by the mighty conglomerate FrobozzCo, as well as a battery powered brass lantern.

More recently has come Beyond Zork, a combination of a role playing game, and Infocom's Interactive Fiction. The latest of the Zork games, however, is the earliest. Zork Zero is the prequel to Zork, and starts before the downfall of the Great Underground Empire.

At the start of the game, you play a servant at one of Lord Dimwit Flathead the Excessive. While rushing around performing menial duties at one of Lord Dimwit's small gatherings (a few thousand guests) the mighty Wizard Megaboz appears and places a great curse on the lord, his family, and his life. Megaboz disappears and a cauldron is left smoking in the centre of the room. All of Dimwit's enchanters and wizards combined can only manage to delay the curse for ninety four years. After that time, the empire will collapse. Dimwit is also doomed. He dies several sentences later. Thus endeth the prologue.

In the game itself, you play a descendant of the servant from the prologue. The difference is that there is only one other inhabitant, a jester who both aids and hinders your progress.

Your quest is to remove the curse and avert the downfall of Quendor. Zork Zero is different to other Infocom adventures in that it has graphics. The most evident of these is the on screen mapping. This is an extremely useful function, as it allows you to move around by simply clicking in rooms. The user interface is also much easier to use than other adventures. As well as the normal keyboard parser, you can move by clicking on a compass at the top of the screen. You can also define the function keys to commonly used commands.

This is much more than a straight adventure game. You have to be able to win a game of Double Fanucci. Double Fanucci is a card game (the nation sport of Quendor) that has such plays as join, split, muttonate and ionize.

Zork Zero also contains its fair share of items from the mighty FrobozzCo, such as the Magic Passages from the Frobozz Magic Passage Co and number tickets in the inquisition from the Frobozz Magic Inquisition Ticket Co. You even get a chance to explore the four hundreded storey FrobozzCo offices.

The game comes well packaged with a blue print of a development west of the Great Underground Highway, a scrap of parchment with clues for removing the curse, and "The Flathead Calendar" for the year 883 GUE, which contains biographies on the twelve Flatheads (such as Thomas Alva Flathead, who invented the battery powered brass lantern), as

well as some essential clues.

Zork Zero is an excellent game. If you liked the original Zork (or Zorks) you don't want to miss out on the prelude to them all. If you just like adventures a bit, you will love Zork Zero's easy interface and it's immediate attraction. Try it. You won't regret it!

Richard Stocks

AUGADS

For Sale: One Acme 30 Meg Hard drive for the Amiga 500 (Actually 31 Meg!). External Power supply, pre-formatted, backup facility included. Originally \$1230 - NOW only \$800! For a limited time only (i.e. until someone buys it). Contact saint nikolai kingsley on 772 8472 after 7:00 p.m weekdays, or any time on weekends.

For Sale: Spirit Technology SIN-500 2 Meg Internal Memory expansion board. Fully populated, comes with a 68000-10 (thanks, nev) so you don't get traumatised by trying to put your old 68000 into it. Originally \$755 - Now only \$500! I'm not kidding. Contact saint nikolai kingsley on 772 8472 after 7:00 p.m weekdays, or any time on weekends. can you dig it

11/26/89 (ie 26/11/89, these yanks'll never learn)

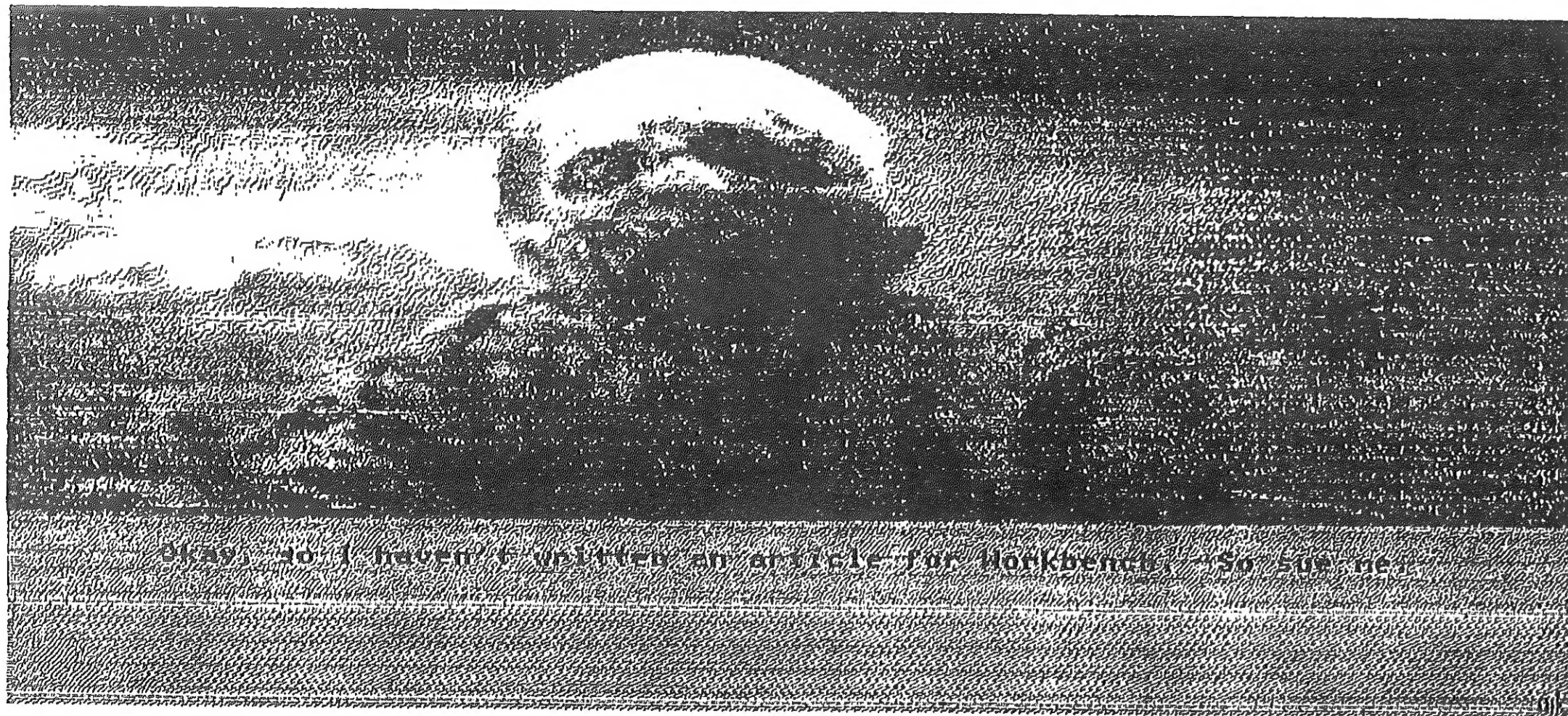
JRCOMMing

Alot of callers have been asking when JR-Comm 1.0 will be released. So, I figured I should make a public comment here in the news file to update everyone about the progress of 1.0 to date.

Basically, the program is finished as far as new features go. The bug fixes are what's holding the thing up right now. I've also got to finish the external phonebook editor as well as the documentation.

I honestly don't know when I'll be finished now. The program has grown to be quite complex and the bug fixing has been more involved then I had anticipated. I'm also going to be damn certain that this release will be as bug free as possible before I release it. All I can say is hold in there and bear with me, I won't let you down.

-jack-



A COMMAND BY ANY OTHER NAME (WOULD BE EASIER TO TYPE)

by Mark Kelly, Swan Hill

There are some things you get sick of typing. CD DFO:, LIST DFI: DIRS and the like. They're not long but they're annoying when the fingers aren't aiming straight any more in the wee small hours.

One night when I was entertaining my friends by a dramatic reading from the AmigaDOS 1.3 Upgrade Manual, I stumbled upon a few neglected gems. One was ALIAS. This is clever little beastie available when using a NewCon CLI shell. My shell-startup file (the script executed when a SHELL starts up) used to be:

```
Prompt "%N.%S> "
path reset v: v:c ram: sys:c sys:system sys:s
(where v: is a shorthand for vd0:. I don't like typing more than I have to. I use "Assign v: vd0:" in my s/startup-sequence after vd0: is mounted.)
```

The first line gives me a useful prompt showing the current directory and the task number. The second line sets the path for command searches. (I really WISH daughter CLI tasks would inherit the parent's path. They don't, using shells, so the PATH command is necessary.) Since I discovered ALIAS, my s/shell-startup now has these lines added:

```
alias dirs list [] dirs nohead
alias files list [] files nohead
alias 0 execute PCD df0:
alias 1 execute PCD df1:
alias v execute PCD vd0:
```

ALIAS lets you provide shorter or more meaningful alternatives for giving commands. The [] in the aliases is where the parameter typed after the command will be inserted by the system. With these aliases defined, life gets easier. For example,

typing "dirs df1:" is translated by the system into "LIST df1: DIRS NOHEAD". Giving the command "0" uses the PCD script to make df0: the current directory (and remember where I originally came from: typing PCD will return me to the original directory.) Similarly, typing "1" makes df1: current and V makes my beloved vd0: (the ASDG recoverable ram disk) the current directory.

An alternative to ALIAS is renaming the command. (e.g. long ago I renamed Delete as Del.) This can be troublesome when other programs look for a command under its original name. Using an alias leaves the command names undisturbed. I'm sure you can think of all sorts of commands you'd like to make a shorthand for, such as:

```
alias X execute
alias D dir
alias MOUSE system/dmouse -w1 -c2 -A0 -C newshell
alias FORM format drive [] name empty quick noicons
alias ARC comms:arc/arc -x [] #?
```

If you use FaccII (what? you don't? Get it!) your s/startup-sequence will be sped up if you group similar statements together (Assigns, Makedirs etc.) FaccII speeds system operation by caching disk reads to memory, and if you load & execute a command, then repeat the command, FaccII will already have the command in RAM and won't have to re-read the disk (this depends on the size of the buffer you set, obviously. Most AmigaDOS commands are short and FaccII can store several of them.) By grouping similar commands together in your startup-sequence, the Amiga only has to read the disk for the first call and can then rely on FaccII's cache for subsequent invocations of the command.

You probably already know this, but I'll mention it anyway. To clear the screen (say, when s/startup-sequence is running), use ECHO "<CTRL-L>". The CTRL-L will appear as "L" in reverse video. (Pressing <ESC> c will do the same). CTRL-G will flash the screen. CTRL-I will advance to the next tab stop. The

other old magic codes are:

```
<ESC> [1m = bold
<ESC> [2m = black characters
<ESC> [3m = italics on
<ESC> [4m = underline on
<ESC> [7m = reverse video on
<ESC> [0m = normal
<ESC> c = clear screen & revert to normal characters
e.g. ECHO "<ESC> c<ESC> [1m<ESC> [3m Fancy text!
<ESC> [0m"
```

Since my recent grizzles about the public domain PACMAN87 game that I couldn't get running, I've solved the problem. I had some ASSIGNments that didn't agree with the IconX assignments. (Rather embarrassing!)

My latest utility toy I'm loading at startup time is WICON which iconifies windows to get them out of the way with a click of the right mouse button. It also does nifty Mac-like "window zooming" as they open and close: not essential (it can be disabled) but it's fun. It's even written by an Aussie, Stephen Sweeting of SMAUG. It hasn't caused any hassles with any other programs or utilities running concurrently: a problem with some other utilities I have known.)

Get a hold of KICKFONT on one of the recent Fish disks. It tweaks the Kickstart disk to replace Topaz with a more pleasant font (similar to Pearl.) It's quick and simple to do and the new font is used for all output. No more "SetFont" utilities needed! Just remember to run SumKick (provided with KickFont) to reset the KickStart disk's checksum after the upgrade. If you don't, resetting takes you way back to the "Insert KickStart 1.3" stage (but the contents of a recoverable ram disk aren't lost).

Another fun gizmo I've been finding uses for is SnipIt 1.2 for cutting and pasting text from any windows. It's vastly superior in operation to TSnip (and doesn't require clumsy support files cluttering up the disk). I summon it with snipit a4 b4 p"" (to use the CAPSLOCK key as the magic key when pressing the left mouse button to cut and the right mouse button to paste. The only hitch occurs when Wicon's also running and SnipIt's using the CAPSLOCK magic key: SnipIt's pasting manoeuvre is recognised by Wicon as an "iconify this window!" command. To prevent this, just ensure the mouse is MOVING when you press the RMB to make SnipIt paste.

With all the utilities now using the mouse buttons, including Dmouse's "click-to-front/click-to-back" features, I fear my poor mouse is going to have a nervous breakdown soon. Still, it says a lot for the Amiga that all of these nifty utilities can be piled one on top of the other to enhance the system's performance. The other day I booted up a plain vanilla WorkBench 1.1 disk without FaccII, FastFonts, Dmouse (with its neat window/screen juggling, auto-window-activation, screen-blanking, POPCLI function and mouse acceleration), SnipIt, Wicon, and a core of commonly-used CLI commands in the recoverable ram disk. It made me realise just how far we've come in 3 years! I can't wait to see what goodies are in WB1.4: maybe

even (GASP!) a full-screen editor for the CLI??? Maybe USEFUL environmental variables with BASIC-like manipulation and comparison commands, so you don't need a doctorate in computer science to create a simple loop as per Upgrade 1.3 manual, page 2-12, which - by the way - is so buggy it takes a week to fix. Maybe Commodore could buy the rights to the AmigaDOS Replacement Project from MicroSmiths so we get decent, consistent, small commands? Maybe a more extended configuration file in which a few OPTIONS could be built into DOS and Intuition (e.g. to disable the WARNING requester every time a file is deleted or to permanently set some of the hundreds of flags AmigaDOS commands use). Maybe Commodore could in-build some of the Dmouse types of operations (intelligent window shuffling, screen and/or pointer-blanking etc). At LEAST they could manage an inbuilt POPCLI feature! Why not take ARP's example and inbuild script commands (if/endif/else/failat etc) INTO the shells? After all, where else are they used? It's stupid having them as standard DOS commands. I realise it would be too much for them to even contemplate adding an integrated FaccII-type intelligent caching system. Come on Commodore! These utilities have been around for years! They can't be too hard to license or reproduce. They would certainly make the Amiga more powerful and - by being coordinated by the makers of the machine - the inevitable GURUS and annoying clashes between patched utilities would be minimized. Still, I guess Commodore's strategy is to see what public domain utilities turn up, wait four years to hold boardroom discussions, and then implement their own substandard imitation (like RAD:). Then they'll wonder why the rest of the industry is so far ahead of them. All I can say is thank God for the REAL Commodore team: MicroSmiths, Matt Dillon, William Hawes et al.

Getting baud

by Mark Kelly, Swan Hill

After eleven years with microcomputers, I've finally taken the next great step forward in my evolution as a micro sapien. I bought a modem. I've been thinking about it for eight years but the convoluted discussions I read of parity, RS-232 pin outs, Xmodem, Ymodem, Hayes compatibility, Zmodem, Kermit (KERMIT? Good grief! Amphibious communications?), RTS/CTS, XON/XOFF and Christensen protocols put me off the idea. HARDWARE

One day, however, in a claret delirium, I rang Maestro in NSW and ordered a Maestro 2400ZXR modem. It costs about \$400 and is auto-everything. That sounded nice. It arrived about four days later. As for a cable, I tossed up between making my own and buying one. Remembering my usual success with soldering, I bought one: a gay cable (male-to-male) with all 25 pins wired straight through. I took the precaution of cutting pins 14, 21 and 23 on one plug, however, because of the Amiga 1000's idiosyncratic whim of putting 5 or 12 volts down them.

SOFTWARE

I've been collecting communications programs as they appeared on Fish Disks so I just had to choose one of the eight I

had amassed. I settled on Handshake 1.2.1 which offers easy phoning, redialling, file selection and didn't seem to do anything naughty when multitasking. It offers most protocols for downloading files except the fast Zmodem. Using Ymodem is all right as a substitute (and certainly faster than Xmodem).

PHONEWARE

All's well so far, I thought. Modem in place (on its side, wedged between books in a bookcase to silence the P.A. speaker in it), cable attached, HandShake loaded, Alink's phone numbers stored in Handshake's phone directory. I called Alink, leaving my modem and Alink's modem to negotiate baud rates. I got a carrier, a connect 2400 message; and garbage! An alphabet soup screen. Not only that, but an annoying whine was coming from the 1081 monitor's internal speaker when the modem was on. I've been working with computers too long to have been surprised. Nothing works first time.

The problem now was diagnosis. The fault could have been in the brand-new modem, the brand-new cable, the brand-new comms program or the phone line itself. There weren't any easy ways to test each item in isolation, either. I finally settled on the easiest: the phone line. I typed ATB3 to force the modem to run at 300 bits per second instead of 2400 and called again. CONNECT! Telecom's to blame! (I live in Swan Hill, about 450 km from the host computer, so I suffer from noisy lines and homicidal STD charges).

OPERATION

I've called Alink1 and Alink2 several times now and I'm getting used to jumping from menu to menu as quickly as possible to reduce connect time (and STD charges). I occasionally still try connecting at 1200 baud to see if the lines have improved. They haven't. I talked to a Telecom technician who pointed out the regular clicking on my phone line. "That's from a badly grounded electric fence," he said. That's another thing you urban types don't have to contend with. Imagine downloading the full 105K of ARP 1.3 at 300 baud at 15 cents a minute (off-peak rate)! That's what I had to do. It took just over an hour (apologies to others trying to logon at that time!) and was only possible because of the friendly sysop's generous extension of my connect time. Thanks!

FINALLY

Access to Electronic Bulletin Boards (BBS) such as AUG's Alink is certainly useful: the PD software on tap is certainly handy and being able to get help from online experts via the message system is a boon. I'm still learning. The communications jargon is becoming clearer, but I have yet to find clear descriptions of the differences between communications protocols (e.g. what is Kermit good for?)

In a spare moment I cannibalised my null modem (described in an earlier article) and rewired it as a modem cable (connecting pins 2,3,5,6,7,8,20) and now the monitor's speaker doesn't whine any more. (Since then, while browsing through Alink1's message section, I found a helpful comment by another user

with a whining speaker. He said the problem was pin 15, Amiga's AUDIO-OUT. I cut that pin on my original cable and the whining has gone when I use that cable. Another example of the benefit of Bulletin Boards!)

The Maestro seems to work just fine and Handshake does everything I need (except Zmodem support). The only remaining problem is now that I have a modem, I'm going to start craving a hard disk. Will it never end?

NWAUG NWAUG NWAUG NWAUG NWAUG

North West Amiga Users Group

A Geographical Special Interest Group OF AUG

Meetings held every 2nd Wednesday
at 7:30 pm in Rooms 19 & 20,
1st Floor

Essendon Community Centre,
Cnr Mt Alexander & Pascoe Vale Rds
Moonee Ponds 3039

Meetings Scheduled:

31/1/90 14/2/90 28/2/90

Note

No meeting on the 17/1/90

Nwaug members to be members of AUG

NWAUG annual fee of \$5 helps cover
PD, Library and Equipment costs.

Meeting Entrance fee of \$1 (\$2 visitors)
covers room hire/coffee/biscuits.

NWAUG - A Multitasking SIG of AUG

See YOU at a meeting soon

NWAUG NWAUG NWAUG NWAUG NWAUG

DID YOU KNOW

Did you know that all of the articles in this newsletter are purely derived from members? Yes, that means there are no column writers as such; everyone who's name you see in this newsletter is an ordinary paid AUG member. Every person (and this should include you) who sends something is rewarded

SCRAMBLES

(aSortments of Con's RAMBLES)

So, we're gonna get stuck with this no articles thing for some time eh? Well, I've got bad news for you. Since there are no more articles, I am going to ramble on from here to the editor's column about anything I can think of remotely interesting. (And there's nothing you can do about it because I'm the editor).

Did anyone watch on SBS the special on computer animation called "Computer Dreams"? It was a wonderful show with all the latest and greatest bits of animation from all sorts of super computers. Interestingly enough, when it came to describing how people in the home and work place now have these animation capabilities on their own computers, I was seeing nothing but Rocket Ranger, Defender of the Crown, DIGIVIEW, and of course, all of them on Amiga 2000's.

So, if our beloved Amiga is so powerful and seems to be the only choice in things like that, then why can't we have the whole marketplace filled with quality Amiga's? Because those two terms rarely meet in our world. Quality and Amiga don't seem to mix. It's hard to describe, but all Amiga owners understand what I am talking about; All the power is at their hands, but we just don't have any decent programs using that power. So, who's to blame? Commodore? Well, I don't think so, because despite what everyone says, it's not easy to market a computer that since its conception has had an image problem - what is it? A Games computer? An Animation computer? A Desktop Publishing Machine? A number cruncher? A Sound machine? We all know it's capable, given the right attention, to do all those things superiorly compared to any other computer system 5 times the price, but that attention is never given. What a pity, with such an Operating System to boot! (that was never meant to be a pun).

Anyway, as it turns out, as I am writing this article, I am using one of those programs that should have been where it is now two years ago. I am currently using Professional Page V1.3 (no it's not mine and unfortunately I have not the money to buy it.) This program has come a very very long way since its conception, despite the fact that it is almost exactly the same program. You see, as I was saying before, the quality and finishing touches to a program are really what give it a lasting and winning quality whether or not there are better programs around. For instance, Professional Page 1.0 had almost the same feature as 1.3, but could only print out in PostScript - pretty limited market I'll say. As 1.1 came out, it was fitted with dot matrix output - wow we thought, and then we realised it was absolutely useless - reason being a full page would print out in best quality on a piece of paper about 2.5 inches wide and 4 inches high, and if you scaled it up to the size of a full page, there was no increase in resolution, ie it was very chunky. I haven't seen 1.2, so I don't know what they've done with that version. 1.3 however, prints out dot matrix in absolute quality (within the limits of the font detail on the disk. However, this font detail limit is no more with the advent of the Compugraphic font.

Gold Disk (the makers of Professional Page) hired an external

group, (Compugraphic) to create a scalable font for use on screen and in print much like PageStream. What this means is that, like a PostScript interpreter, all the fonts on the Compugraphic font disk are described in terms of lines, and the font will be absolutely perfect no matter how many points you make it, whether it be 4 point Times or 250 point Times. So what, you say; PageStream had that ages ago... ah yes PageStream. Well, Compugraphic's interpretation of the Scalable font has been voted by some external groups (who knows who they were) to be better than any PS/2 or MAC program, bar NONE! If you look at the output from PageStream, it looks very smooth. If you look at the output from Professional Page using Compugraphic fonts, the PageStream output looks primitive by comparison, to say the least.

Ah but for the love of money. PageStream has a couple of extra features compared to Professional Page, but it is very (and I emphasize the very) buggy. It is almost impossible (from the reports I have heard) to have a session free from the turbaned one (Oh great guru in the sky). Colour separation from Professional Page is, as the name implies, Professional quality. Some magazines have tried outputting to Professional quality Laser printers, and the results are flawless!

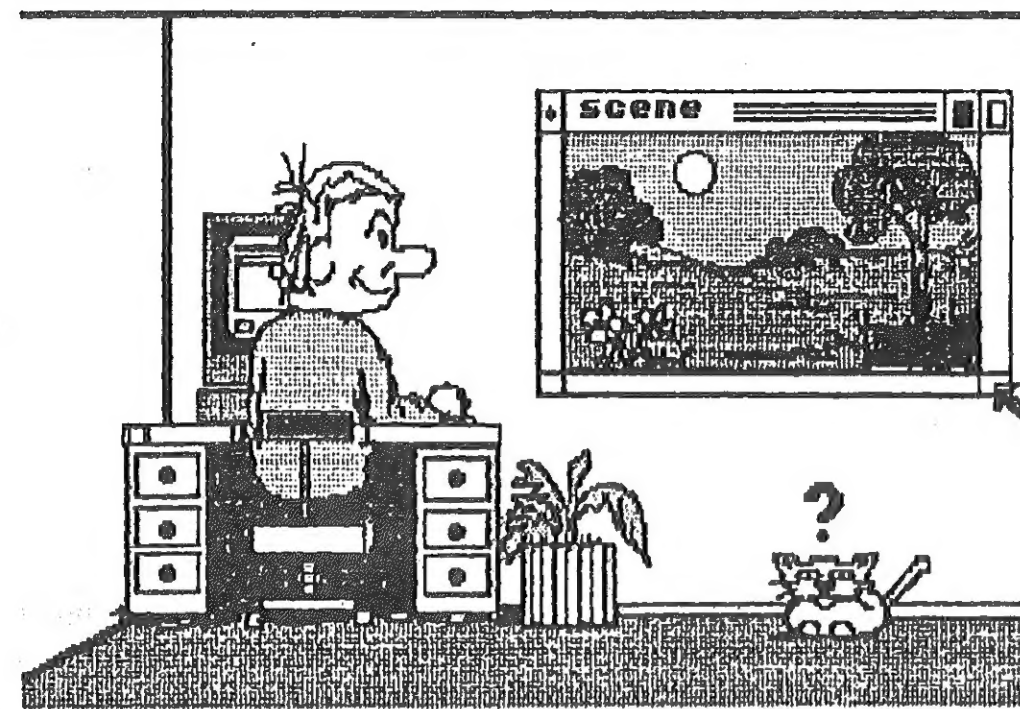
So what is there bad about this program, Con? Why do you fault it not? Well, there is a crunch, or should I call it a grind? Well, coming on three disks, it's getting a bit large now. One disk alone is for the use of the Compugraphic fonts - and there are only 2 fonts on the disk! WHY? Well, the program uses an immense cache to store used and pre-stored descriptions of dot image versions of the fonts for on screen and printer output use. What this means is that a great deal of memory and disk space is used by the program while it is running! Plus, if you use floppy drives, it takes a while for the font to load off disk each time you use a previously unused character. Then, when you think you've become accustomed to the extra time, you find that all the disk grinding and over-use causes a disk error - not surprising considering the amount it uses it. So, what do you do? Put it all in RAM to speed it up? Well, you would need about three EXTRA megs that the program wouldn't want to use to put the whole program in RAM, and the program itself needs at least 1 meg (but you can't really use it without 2, and 3 1/2 is just about right for serious use), so you must have a fully populated (I mean 9 megs) computer before you can consider doing that. But, if you have a hard drive, all is saved. All is forgiven, and everything works the way it was designed.

So, if you want to use a truly Professional Desktop Publishing program on the Amiga, I suggest three and a half megs on board and a hard drive, and use Professional Page. Oh yes, don't think I have included all the goodies available on the latest release; on the contrary, there are huge benefits and new features that are infinitely useful which I will not even begin to describe unless I can't fill the rest of this newsletter with other garbage.

Now, as I was talking about printing, I might as well mention a few interesting things about it. PixelScript, the follow up program to printscript is out, and I don't know exactly how many fonts it has now (it didn't actually have the same four normal PostScript fonts Times Courier Symbol & Helvetica) but for those of you who haven't heard of it, the idea is to convert PostScript files for use with dot matrix outputs, kind of like what the latest version of Professional Page achieves beautifully. Well, I'm afraid the output is nice, but it didn't compare with the PPage output I saw. Actually, one of the beauties of these two programs being able to do these, is that you can have a normal Laser printer (about 1/4 the cost of a real PostScript) and have the flexibility and power of the PostScript language, on a parallel port (which if you may remember some time ago I said the Apple Laserwriter Plus I have used at times worked off a serial port only at 9600 baud at most). But there are postscript interpreter modifications for HP Laser's out now anyway being about half the price of a normal PostScript (total around 4 grand). The laser printer I normally use is a LaserJet with JetScript interpreter.

On the subject of printing (yet again) the most common dot matrix printer driver around is the EpsonX printer driver (9 pin b/w or colour output). Having played around for great lengths of time with the real 1.3 printer driver, I have found that only three of the seven available densities are of any use; density 1, 120x72 dpi; density 2 120x144 dpi and density 4 120x216. Now you may wonder why I say 240x216 isn't useful. Well, if you have a normal EpsonX compatible printer (I can't think of any exceptions, but just in case), then 240 horizontal density is only emulated, as the printer can't print consecutive dots at that density, so the actual print quality is 120x216 (more or less, given that the dots will be slightly differently spaced). Despite the fact that the printer drive does density 6 (which is the same as density 7) in three passes, it cannot get over this problem. One public domain program I can think of, GPrint (may be shareware, but I'm not sure) can actually get 240x216 dpi out of these printers by intelligently choosing which pixels to print on each pass on the printer. Unfortunately, all it can do is black and white print outs, no shades, but who knows what the future holds. In fact, this newsletter issue, for reasons that won't become apparent until you read the editor's column, was printed on a very cheap old 9 pin Epson GX80 from Professional Page 1.3 using density 4. I know the output looks crummy, but believe it or not, it looks that way mostly because the printing process used on the newsletter doesn't agree too well with dot matrix output, grossly exaggerating any flaws. The final output (the actual dot matrix printout) is very acceptable, and if I had a 24 pin printer, I could get away with using that in place of the laser printer (except say for pictures which almost always look like total crap from a dot matrix after the printing process unless they are two colour!)

Speaking of picture printouts, did you know that the easiest, quickest and nicest pictures for me to print, and the most effective in the newsletter, are two colour (b/w) line drawings. Despite all the amazing print quality and computer power at my hands, these still are the things I prefer. Just check out this beauty from John Casey...



See what I mean? I guess the quality of this drawing helps too, but it never ceases to amaze me when people send in 4000 coloured drawings to be printed and expect me to put them on the front cover showing how amazing our computer can be...

If you do create something to send in, (and all things sent in are greatly appreciated and justly rewarded), remember what format it will appear in, in the newsletter.

On the topic of pictures, I had a note from one of my regular contributors, which said something like this: I finally found out why IFF pics don't compress well, because they are already compressed. I thought I'd point out that the IFF format pictures can be compressed, and they also can be un-compressed. If you wish to archive a picture for sending over the modem or storage away somewhere and get the maximum compression out of it, there are a few things I can recommend for you. There is a public domain program available on the boards called IFTPIC-CR, which will compress pictures into a format that can then be viewed with an accompanying viewer, CRSHOW. But of course, there are many disadvantages to this, the main one being that you no longer have the universal compatibility of IFF files. Another thing is that the latest (and the one quickly becoming the standard) compressor is LHARC, which uses LZHUFFMAN compression (or some stupid name like that) and is by far the most successful at compressing IFF files. However, Lharc is painfully slow in arcing and de-arc-ing, so you may want to use one of your old favourites instead (for universal compatibility with other files, speed or just plain personal preference). If you do, then I suggest you load the file into a program like PIXmate first, then Pack the Colours (a feature of the program which usually saves some file size) and then convert the file to the minimum number of bit planes without losing colours. Then, save the file with compression OIT (can do with PIXmate and some other graphics programs). The actual file will be larger than before, but when compressed (with say ZOO), will take less space than a standard compressed IFF file. Oh yes, you can do this with LHARC also, making it even more efficient, but I MUCH prefer ZOO for it's speed.

Actually, I do have one more thing from someone else before I ramble on some more, so I'll hand over now to one of our many favourites, Lester McClure.

BUILD YOUR OWN ONE MEGABYTE MEMORY CARD

A1000 owners, AUG have had manufactured printed circuit boards from an original design by Alan Kent.

The board features up to 1Mb RAM (using 41256's + the Texas Instruments THCT4502 RAM controller), a battery backed clock (Motorola MC146818) and plugs directly onto the expansion connector on the side of the A1000.

The design does not autoconfigure in it's original form although it can be modified to do so (see WORK-BENCH April 1989) and does not pass the bus.

The project is recommended only for those with experience in electronic assembly.

The PCB'd will be available at the meeting for \$35.00
This includes assembly instructions, schematics and a parts list.

For further information contact Michael Woodward at the meeting or on 763 4046 AH.

Magic Numbers

L. McClure December 1989.

Maybe its the time of the year that makes you think of different things, or should that be think of things differently - it doesn't matter. Lately I have noticed the ridiculous tendency that our society has towards producing acronyms for everything. The most common seems to be the Three Letter Acronym (TLA). Is there some logic behind this? With two letters are there insufficient unique combinations? Are four letters too many for the average 'acronyte' to remember or are we frightened of four letter words.

What does all this have to do with Amigas? Well, it seems I have spent considerable time stuck in Melbourne traffic over the festive season and I have begun to notice patterns emerging in the greatest source of pseudo-random TLAs - the motor vehicle number (registration) plate! Within the range of letters used for Victorian vehicle registration there appears to be a large number of computer, and more specifically Amiga related combinations.

AUG - now there a good one to start with. How about CBM and IBM, imagine that incompatible pair sitting in the traffic next to each other on your way to work! Just take a look at the common Amiga acronyms you can easily find. CLI IFF DEL ALT ASK DIR LAB CON DOS AUX HAM. If you dig a little deeper you turn up CIA LIB CSI LVO CAT CMD. There are plenty more to be found in the names of Amiga software packages - ARP DME CSH DSM LSE CED DFC ASH ASM. The assembly language programmers seem to have the most to chose from, just look at the 68000 instruction list - ADD AND ASL ASR BRA BSR CHK CLR CMP LSL LSR LEA etc. etc. While these are not exclusive to the Amiga computer they are CPU instructions, and APL is now available for the Amiga. The data comms. people have their group as well - BBS DTR CTS DCD CTS BPS BIX ARC and the recent change in regis-

tration for Telecom vehicles I found interesting. DTE, now really, I think DCE would have been more appropriate considering their line of business.

Others simply deceive you at first glance, DFO (resembles DFO) DFI, DHO, JHO, DHI but of course they don't really qualify.

To finish I'll offer a challenge. The first person to tell me at the next club meeting which obvious Amiga TLAs I have missed in Victorian registrations (personalised plates excepted) wins themselves a box of 3 1/2 inch floppy disks. How many acronyms will you need to win the prize - 3 of course. Committee members and others likely to have an unfair advantage (like CON the newsletter Ed.) are ineligible.

[Ed's note - you'll notice my name has already been used as an acronym so don't go trying to win with that one...]

Editor's Column

(written 3-Jan-90)

Ok, don't go making a big fuss of it, you don't need to phone me up or anything, I KNOW it looks like dot matrix output. That's because it IS! Finding a PostScript laser printer to print out the newsletter when all my contacts are on holidays was impossible. I'll admit, I thought of skimping, but could you look into those eyes and skip on him (that commercial makes me chuck but nevertheless I have skimped.) I went from a PostScript laser printer to the other end of the spectrum, a nine pin b/w dot matrix, and I'm not ashamed of it. What else could I do? At least I tried hard and used the most capable program for that purpose. PPage1.3.

That didn't bother me this month because I had access to the program and the newsletter was still finished in time. Our printer actually came from home to open up his shop just to print the newsletter this month too.

AMIGAHELP-NETWORK

The following is a list of AUG members who have volunteered to share their knowledge/experiences with others. If you also want to help and have your name listed here please contact Lester McClure (233 5664 AH). The names are not listed in any order of priority and the format may change in future listings. Please keep contacts to reasonable hours (6 to 9 pm unless otherwise mentioned) and remember one very important basis of this service - they are volunteers...

Neville Sleep	-	AmigaBasic (beginner level)	- 546 0633
Rudy Kohut	-	AmigaBasic (intermediate)	- 807 3911
John Elston	-	AmigaBasic (advanced)	- 375 4142
Alan Garner	-	AmigaBasic, A/C Basic	- 879 2683
Mal Woods	-	C(Introductory), Professional Page	- 888 8129
Andrew Gelme	-	C (advanced) - AZTEC	- 645 1744
Eric Salter	-	C (advanced) - LATTICE, TeX	- 861 9117
Norm Christian	-	Amiga Art, Music	- 580 3756
Neil Rutledge	-	Music, Audio Sampling, MIDI	- 597 0928
Russ Lorback	-	Excellence!, Superbase Professional (Beg-Int) After 9:30 pm	- 756 6640
Darren King	-	Amiga Viruses, Modems/communications	- 546 5040
George Wahr	-	Side-Car, Bridgeboard	- 376 6180
James Gardiner	-	AmigaDOS, Auto-boot hard drives	- 523 6843
Stephen Bell	-	Hardware design	- 25 8415
Joe Santamaria	-	Graphic arts - DPaint, Sculpt etc.	- 836 9129
John Hampson	-	Modula-2	- 584 3921

What was annoying was that there were no articles in the mail. Since I was on holidays, I could sit down and type away garbage until the newsletter was full, but even you know that that's not good enough. I can't write quality articles if I'm just filling in space that would be much better used with high quality articles from all the useful members of the club. No I will not get articles from other club's magazines because I feel our members are more than capable of writing good articles, and after all, it is the newsletter of the Amiga Users Group, not a crummy computer magazine.

When people do finally feel like writing an article, only then do realise they don't know what is involved and spend their time calling me up when all the information is on the inside front cover.

The way I figure it is that people don't look at that front cover unless they want something, whereas anything in the newsletter they will at least skim over it. So, I will give you all the details here.

Articles, drawings, cartoons and comments are actively sought for publication in Amiga Workbench. All contributions submitted for the purpose of publication that are printed in the newsletter are rewarded on the basis of one free public domain disk copy per column or half page printed with a minimum of one free copy. Contributions may be sent in on disk, paper or uploaded to Amiga Link I/II in the area set aside for this purpose, or handed to a committee member at a meeting. When

sending in a text file for inclusion, please send your contribution in text-only, non-formatted (ie no justification), or if that is not possible, the only formats accepted are: WordPerfect, Scribble, TextCraft & TextCraft+, Excellence!, Professional Page Generic or Professional Page Transcript. If you do send the file in one of these formats, please make mention somewhere what format it is. Your name is vital if you wish to receive PD tokens, or you may wish to remain anonymous.

Absolute deadline for articles is 23 days before the meeting date of the issue you wish your article to be in. Contributions can be sent to: The Editor, AUG, PO Box 48, Boronia 3155.

There, that settles that. So, I hope you all had a nice Christmas/New Year bash or whatever it was you did or didn't do.. blah blah blah.

I can't believe the amount of dribble I put into this month's newsletter. I just hope it doesn't stay that way.

Oh yes, the Brilliant little cartoons you see in this month's issue were from John Casey. He has sent some more in, and I think you'll get to see them next month.
See you at the Next Main Meeting.

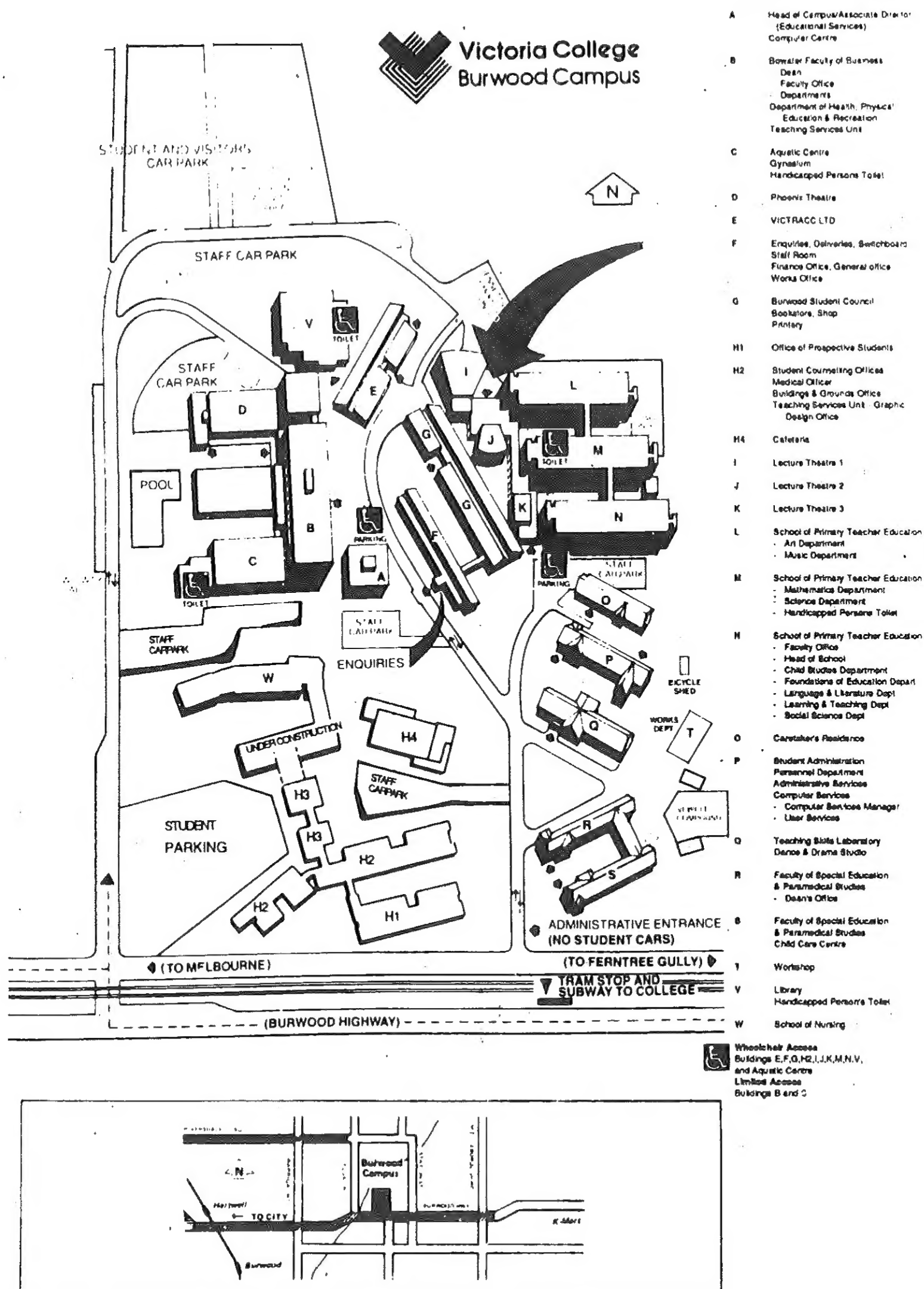
Public Domain Software Order Form									
Mail to: Amiga Users Group, PO Box 48, Boronia, 3155, Victoria									
Disk Numbers:									
Don't forget to specify collection name, ie Fish, Amigan, Amicus, etc									
Disks supplied by Amiga Users Group @ \$8 each							\$		
Disks supplied by member @ \$2 each							\$		
Club Use Only:							Total \$		
Member's Name:					Membership #:				
Address:									
Postcode:									

Newsletter Back Issue Order Form									
Mail to: Amiga Users Group, PO Box 48, Boronia, 3155, Victoria									
Issue Numbers:									
Be patient, we may have to reprint some issues to fill your request									
Number of issues ordered @ \$2 each							\$		
Club Use Only:							Total \$		
Member's Name:					Membership #:				
Address:									
Postcode:									

Application for Membership of The Amiga Users Group Inc					
Membership is \$25 per year. Send your cheque to: Amiga Users Group Inc, PO Box 48, Boronia, 3155					
Surname: _____			Details on this side are optional		
First Name: _____			Year of birth: _____ Which model Amiga: _____		
Address: _____			Occupation: _____		
Postcode: _____			Interests: _____		
Phone Number: _____ STD Code: _____					
Where did you hear about AUG: _____					
			Dealer's Name: _____		
			Dealer's Address: _____		
Signed: _____			Date: _____		
If admitted as a member, I agree to abide by the rules of the Association for the time being in force.					
Club Use Only	Date	Paid	Rcpt #	Memb #	Card Sent

January 1990 Amiga Workbench

AUG normally meets on the third Sunday of each month



Where is Victoria College, Burwood Campus?

Melways Map 61 reference B5.

People often have difficulty locating our meeting place the first few times. Victoria College is on the North side of Burwood Highway, Burwood, just East of Elgar road. Coming from the City along Burwood Highway, turn left at the first set of traffic lights after Elgar road. Follow the road around past the football oval, over five traffic bumps to the car parking area near the netball courts. Further up the road, to the right, you'll find Lecture Theatre 2.